

TEXAS DEPARTMENT OF WATER RESOURCES  
Industrial Solid Waste Disposal Compliance Monitoring Inspection

Inspection Cover Sheet (see reverse side for checklist use and general instructions)

Compliant \_\_\_\_\_

Texas Permit/Reg. No. 30689Noncompliant xxx (explain by separate memo)EPA I.D. No. Plant: TXD00461533

Marine Terminal: TXD008073322

## Site Operator Information:

Name of Company Union Carbide CorporationCompany's Address P. O. Box 471Texas City, TexasSite Address 3301 5th Ave. SouthTexas CityCounty GalvestonType of Industry Petrochemical manufacturing from natural gas

Indicate below Classes of Waste managed (Hazardous-H, Class I nonhazardous-NH, Class II-II).

Generator H, NH, II Transporter H, NH, IITreatment H, NH, II Storage H, NH, II Disposal H, NH, II

## Site Information (T.S.D. facilities only)

1. Are facilities located outside the 100 year flood plain area?

Yes \_\_\_\_\_ No XX

2. Describe land use within one mile Industrial, commercial, residential

925768



## Inspection Information:

1. Inspectors Name & Title Fred. C. Dalbey, Field Rep. Phone No. 713/479-5981

2. Inspection Date: April 6, 1982

3. Inspection Participants: Mark Tapp, Environmental Op. Phone No. 713/948-5226

Group Leader; Ted Stiechen, Env. Eng.; Karen Droz, TDWR; Charles Dunn, GCHDApproved: Merton Coloton

District Supervisor

Signed: Fred C. Dalbey

Inspector

Date: 4 May 1982

Date April 23, 1982

Reg./Permit No. 30689

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report

COMMENTS SHEET

SECTION: A Paragraph: 1.b.

GCWDA 40 acre plant treats dilute and concentrated (after primary treatment) process waste streams. Malone disposes of an  $H_2S$  stream (108970). Chemical Waste Mgt. disposes of A-dripolene (111650). Rollins disposes of vinylchloride acetate (112030)-acetone (110090) wastes. The balance of the wastes is disposed of at GCWDA's landfill-landfarm complex.

SECTION: B Paragraph: 1.a.

Inactive OPDA facilities include a primary sludge pond (OPDA #4), the A-drip pond (OPDA #2) and a landfill (OPDA #1). The facilities are considered inactive and Carbide is planning final closure for these facilities.

SECTION: C Paragraph: 3

Carbide has recently added 63 wastes to its registration but has not received the updated version. Most of the added wastes are chemicals listed in 261.33(f) of 40 CFR and as such are not process wastes.

Date April 26, 1982

Reg./Permit No. 30689

## INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection ReportCOMMENTS SHEETSECTION: A Paragraph: 1

Four in-plant equalization ponds have not been deed recorded. Since the closure  
plan stipulates complete removal of contaminants in the ponds, no deed recordation  
is required (see attached letter).

SECTION: A Paragraph: 2

Spills are documented in our files. The latest spill (February 4, 1982) resulted  
from a break in the pipeline carrying concentrated wastes into the East Lagoon of  
the OPDA. Approximately 500 gallons of the waste was lost into Swan Lake. The  
line is presently being repaired. During repair, concentrated waste is discharged  
into the west end of East Lagoon resulting in a decreased holding period for the  
waste in the East Lagoon. (Discharge is normally into the east end of East Lagoon  
as shown in OPDA Figure 2).

SECTION: H Paragraph: 1

In-plant wastes from tank cleaning and API skimmings are transported to phase-  
separator pits at OPDA #1. Since the vacuum trucks go along a public ROW to the  
OPDA the wastes are manifested (see tank checklist for description of phase--  
separator pits).

Date April 27, 1982

Reg./Permit No. 306

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report

COMMENTS SHEET

SECTION: \_\_\_\_\_ Paragraph: 12

A trench surrounds the west, north, and east borders of the landfill. Drainage  
collects at the northeast corner of the landfill from which it is pumped into the  
East Lagoon. The south border of the landfill is lacking a trench (or any type of  
runoff collection system). Runoff from the south end of the Landfill will drain  
into Swan Lake.

SECTION: \_\_\_\_\_ Paragraph: \_\_\_\_\_

SECTION: \_\_\_\_\_ Paragraph: \_\_\_\_\_

Date 3/17/81

Reg./Permit No. 30689

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report

COMMENTS SHEET

SECTION: A Paragraph: 1b.

GCWDA ~~to~~ receives waste streams from on- and off-plant waste collection: stormwater run-off, wash waters, primarily WWT dilute, dilute stream from lagoon WWT. Malone Co. picks up  $H_2S$  waste stream. Chemical Waste Management receives misc HW.

SECTION: D Paragraph: 7

Drum storage area: consists of two drum-holding racks (1 for waste oil, 1 for chemical wastes) above a grated, concrete-curbed deck.

SECTION: B Paragraph: LAKE INSTITUTE

OFF-PLANT DISPOSAL AREA (OPDA) ~~#4~~ closed out and capped with 3' of clay (contains sludge from 1<sup>st</sup> WWT); Serves as collection and storage of stormwater only, which drains into OPDA #5.

OPDA #1 (landfill is <sup>inactive</sup> ~~closed~~ and is presently being closed out.)

ATTACHMENT

Date 3/17/81

Reg./Permit No. 30689

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report

COMMENTS SHEET

SECTION: G Paragraph: 2

Residue Tank #1 (identified as #36 on Key to Plot Plans on Part A, Permit application) showed signs of over fill: dried, black streaks on outside of tank. Cunningham said that the cause was an operator error. This tank is used to hold waste oil (primarily Class I non-hazardous).

SECTION: \_\_\_\_\_ Paragraph: \_\_\_\_\_

SECTION: \_\_\_\_\_ Paragraph: \_\_\_\_\_

ATTACHMENT

To: Union Carbide Corporation

Page -2-  
11-6-80

Samples marked: (4) Ion Exchange Resin - Bldg. No. 224 - 10-15-80  
 (5) Center Press Sludge - B-79 - 10-15-80 - 0830 - By Hunter  
 (6) Poly Inc Feed VA-5 - 10-14-80 - 9:00 PM (Ethylene Diacetate stream)

Received: 10-16-80

## ANALYSIS

	<u>Sample (4)</u>	<u>Sample (5)</u>	<u>Sample (6)</u>
Appearance	Brown resin beads	Very dark, viscous oily liquid	Very dark liquid, partially miscible with water
pH	Not applicable	4.85	2.3
*Flash Point, °F	Not applicable	None below 140	136
**Corrosivity, mmpy	0.009	4.454	0.685

## Results in mg/l of leachate\*

By Atomic Absorption

Arsenic, As	< 0.01	0.02	< 0.01
Barium, Ba	< 0.05	0.1	< 0.1
Cadmium, Cd	< 0.02	< 0.02	< 0.02
Chromium, Cr	< 0.02	50	2.2
Lead, Pb	< 0.1	0.3	< 0.2
Mercury, Hg	< 0.001	< 0.002	< 0.002
Selenium, Se	< 0.01	< 0.05	< 0.01
Silver, Ag	< 0.05	< 0.1	< 0.05

\*Federal Register, May 19, 1980

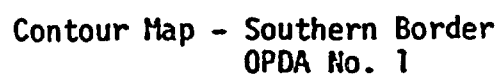
\*\*Following guidelines in NACE Standard TM-01-69 (1976 revision) using SAE1020 corrosion coupons at 55°C.

(more)

8722-8

Attach  
5-28-8

## Attachment 2



Attack  
6-28-5

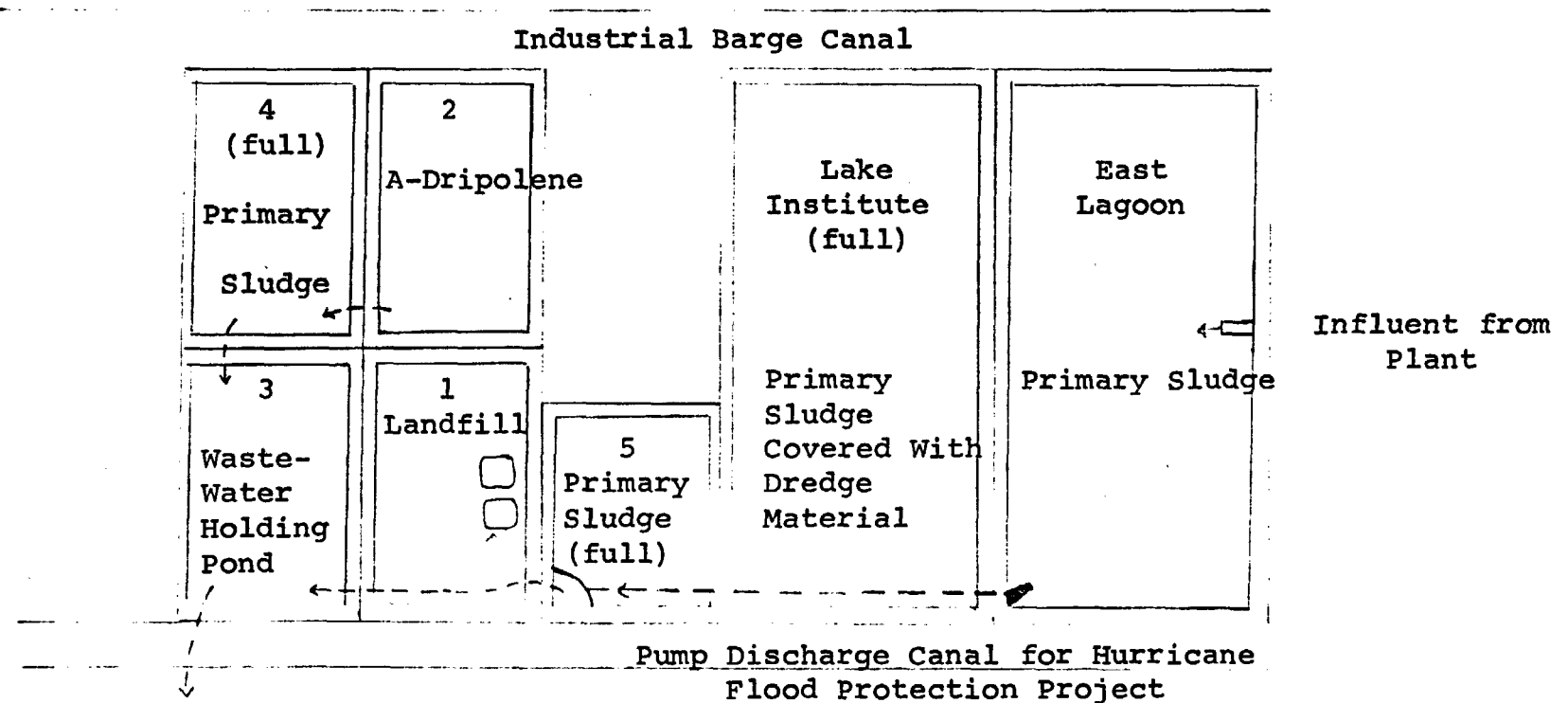


TC 162-60-1-3

Union Carbide

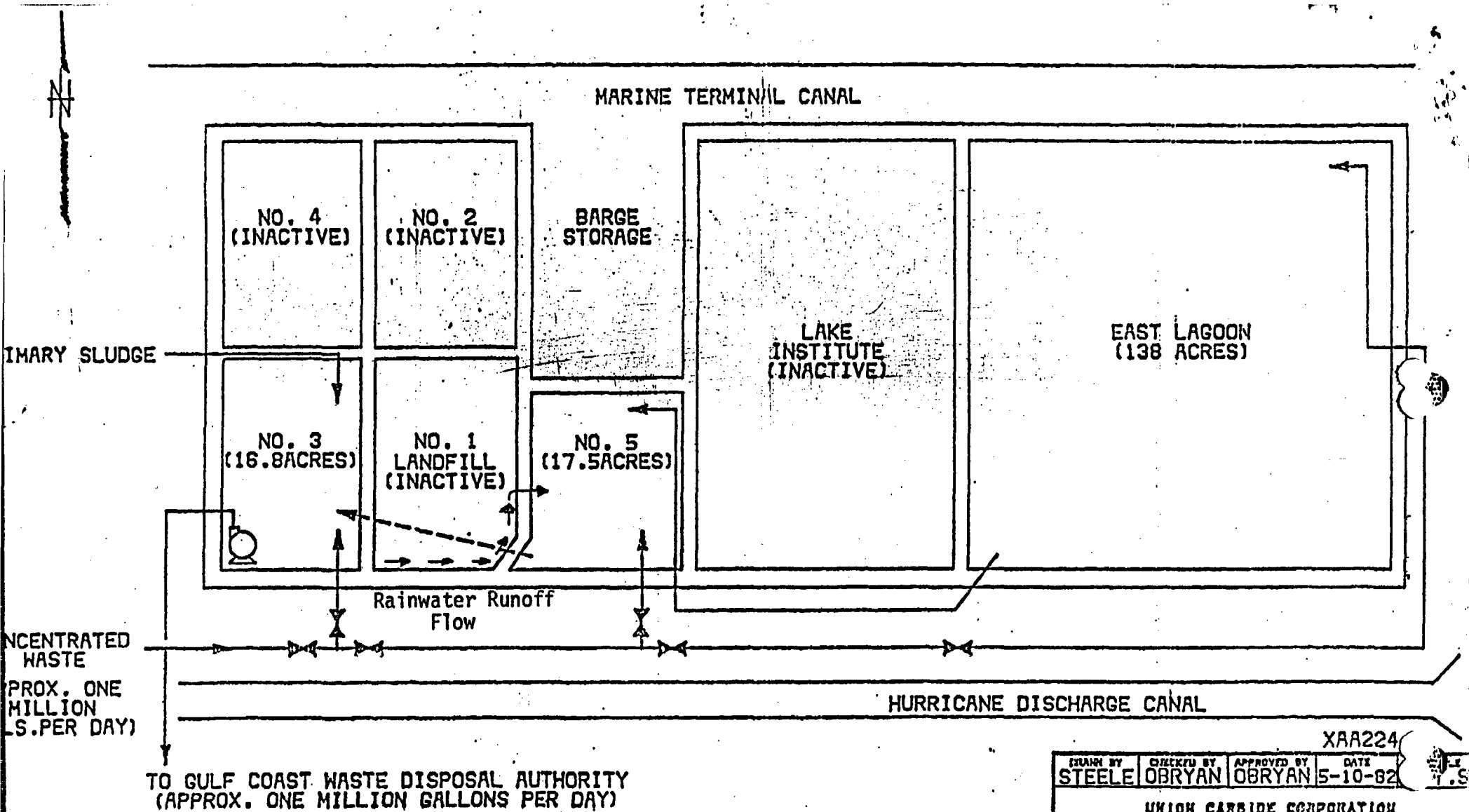
280 Acre Disposal Facility

O P D A



GCWDA - 40 Acre Facility

Settling or Emulsion-Breaking Ponds  
For Oily Wastes



AVERAGE POND RETENTION TIME (DAYS)

EAST LAGOON	-	150
NO. 5 LAGOON	-	20
NO. 3 LAGOON	-	5
<b>TOTAL</b>		<b>175</b>

XAA224

DESIGNED BY <b>STEELE</b>	CHECKED BY <b>OBRYAN</b>	APPROVED BY <b>OBRYAN</b>	DATE <b>5-10-82</b>
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**UNION CARBIDE CORPORATION**  
CHEMICALS AND PLASTICS  
ENGINEERING  
TOWN CITY, TEXAS

**PLOT PLAN  
OFF PLANT DISPOSAL  
AREA (O.P.D.A.)**

JOB NO.	UNIT SYMBOL	ZONE	AREA
		45	

LOCATION	DATE	SUBJECT	DRAWING NO.	REV.
515	05/15	0 11	1070526	

*5/28/82*  
*Black*